

**The Fire Service
and
Higher Education:**

A Blueprint for the 21st Century

Fire Science Coordinators Meeting
National Fire Academy
August 7-8, 1998

Executive Summary

At the invitation of the National Fire Academy (NFA) Staff, a small group of fire science coordinators from around the country assembled at the NFA on August 7-8 to discuss the interrelationship of fire science programs and higher education. The meeting resulted from a continuous desire NFA has had to provide the nation's fire science coordinators a meaningful way to share concerns, challenges, programs, resources, etc. This approach would be similar in concept, but not necessarily in design, to the Training Resource and Data Exchange (TRADE) Program NFA created in 1984.

The group began by identifying challenges and opportunities facing the nation's fire science coordinators working in the environment of higher education. This led the group to draft a mission statement, broad statements of purpose and goals and to map out a survey of these same coordinators. The survey will seek a more representative sample of the challenges and opportunities fire science coordinators are experiencing across the nation. This sampling would then enable a larger group of coordinators to design a "conduit" at a subsequent meeting proposed for the spring, 1999.

The group next planned a publicity campaign to announce the survey, the proposed spring meeting and the "conduit." Members of the group accepted specific assignments related to this publicity campaign.

As soon as the NFA has reviewed and, hopefully, approved the concept, the group will mount its publicity campaign and the NFA will undertake the survey in preparation for the spring, 1999 meeting.

The group made no specific decision regarding the timing of the spring meeting other than to say it should avoid as much as possible any conflicts with NFA and community college calendars.

Participants

Richard Arwood, Director
Fire Service Institute
Iowa State University
Ames, IA

Brian Bay, Director
Health/Emergency Services
Chemeketa Community College
Portland, OR

Gerry Bassett, Program Chair
National Fire Academy
Emmitsburg, Maryland

Romey Brooks, Instructional Systems Specialist
National Fire Academy
Emmitsburg, Maryland

Michelle Harkins, Program Chair
Fire Science
State Technical Institute at Memphis
Memphis, TN

JoAnne F. Hildebrand, Fire Science Coordinator
University of Maryland University College
College Park, MD

Ronald L. Hopkins
Fire and Safety Engineering Technology
Eastern Kentucky University
Richmond, KY

Ed Kaplan, Program Manager
National Fire Academy
Emmitsburg, Maryland

David McFadden, Department Chair
Fire Protection Technical Program
Fox Valley Technical College
Appleton, WI

James Matlock, III
Associate Dean of Health Sciences
San Jacinto College Central
Houston, TX

George Munkenbeck, System Coord.
Fire Education and Training
Community-Technical Colleges
Waterbury, CT

R. Wayne Powell, Program Chair
National Fire Academy
Emmitsburg, MD

Terry Spoor, Associate Director
Utah Fire and Rescue Academy
Utah Valley State College
Elk Ridge, UT

Background

The meeting recently held at the NFA was but the most recent attempt on the part of the United States Fire Administration to reflect on the challenges and opportunities facing higher education and the fire service. There were many other attempts during the past two-and-a-half decades, all trying to identify the needs and trends facing the fire service and its relationship to higher education.

In 1975-1976 the International Association of Fire Chiefs, the International Association of Fire Fighters, the International Society of Fire Service Instructors and the National Fire Protection Association undertook the most comprehensive survey to date of the Nation's colleges and universities offering fire science programs. This effort was under the auspices of the National Fire Prevention and Control Administration, U.S. Department of Commerce. The groups' report, *The Consortium Survey*, offered 21 conclusions. Among them, two are particularly relevant to this report.

1. ...the need for a clearer definition of the role of the two-year colleges and a greater delineation of the training and education functions of fire related programs, with more emphasis on the academic support necessary and which colleges can and should provide.
2. It cannot be stressed too strongly that any national programs in fire training and education must reach out to all segments of fire service and fire professionals. It will be necessary to develop a system which is effective at all levels of the fire service and must cater for the volunteer and paid fire fighter as well as the managers and administrators within the service. It must also extend to industry and commerce, to the educator and to the public as well."

Following that, some schools in Region II and Region X of what would eventually become the Federal Emergency Management Agency (FEMA) undertook fire service education needs analyses that bolstered many of the same conclusions reached in *The Consortium Survey* report.

In early 1977 the Department of Commerce published another report authored by Dr. John Bryan, *A Study of the Relationship of the National Fire Academy to the Fire-Related Education Programs in Colleges and Universities*. Dr. Bryan prefaced his conclusions by saying that "it will be apparent these conclusions have emphasized the formulation of programs for the improvement and development of the faculty in the fire-related education programs in the colleges and universities. It is sincerely believed the current and future problems in the fire-related education programs will be most effectively and efficiently solved with the development of a high-quality, dedicated faculty commensurate to the faculty required in all of the recognized professions."

In 1988 the United States Fire Administration made a limited number of funds available to the seven Open Learning for the Fire Service Program schools, now called the Degrees at a Distance Program (DDP), to promote "stepping stone" linkages between themselves and the community within their respective regions. This generated a greater degree of sharing among the seven institutions and the community colleges affiliated with them and has led to periodic meetings of the seven schools and NFA.

In 1990 Western Illinois University and the University of Memphis, two of the DDP schools, undertook pilot projects. One project led to meetings between Western Illinois University and

Texas' community colleges, state fire commission and the state fire training organization. The other project was a series of region-wide meetings to reach out to the same groups in the states of Tennessee, Arkansas, Kentucky, South Carolina, Alabama and Mississippi. Once again, conclusions similar to earlier ones about the needs and trends of higher education and the fire service emerged.

In 1992 the NFA hosted the Academic Fire Programs Workshop consisting of the participants in the 1990 pilot projects and the remaining DDP representatives. Among other accomplishments, the group developed a model quality fire science associate degree and tried to clarify the roles of the NFA, the community colleges and the state fire training organizations in reference not only to the Consortium but to higher education in general.

In 1995 the United States Fire Administration eliminated funding of DDP. However, the Consortium partners never lost sight of the long-standing goal to find ways to promote greater sharing of programs, resources and concerns among those associated with fire science programs in higher education.

As another attempt to build on the work done in the 1980s and the early 1990s, NFA decided to launch one more attempt to encourage and promote the greater sharing that has long been the dream of so many. The planning conference described in this report is the first step in this latest effort.

Preliminary Mission Statement, Statements of Purpose and Goals

The group generated a provisional mission statement to help focus its discussions. It intends to have this mission statement reviewed by the participants at a meeting tentatively planned for the spring, 1999.

Mission Statement

To enhance the post-secondary education of fire protection, life safety and emergency service providers through quality, innovative and accessible life-long learning to reduce life and property loss from all hazards.

The group synthesized a number of discussion points into the following initial, seminal statements of purpose. As with the provisional mission statement, it is the group's intent to have the participants at the spring meeting review these statements.

Statements of Purpose

1. To provide a forum for degree-granting institutions to address national issues that impact fire, life safety and emergency service related education.
2. To provide an opportunity to enhance the quality of educational programs through a formal inter-institutional network.
3. To promote the acceptance of fire and emergency services providers as professionals.

In addition, a list of goals emerged from the discussions. Time did not allow the group to discuss, refine or relate them to the statements of purpose. However, the group wished to record them in their unrefined form for consideration at a later meeting.

Goals

1. To establish a formal network for post-secondary institutions that offer degree programs in fire and life safety and emergency response.
2. To assist institutions in establishing relationships between degrees and professional certifications.
3. To provide national models for a collegiate curriculum leading to career tracks in fire protection, life safety and emergency services including associated allied professional fields.

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4. To encourage the establishment of partnerships between individual educational institutions, and other local, state and federal fire- and emergency-related training agencies and organizations.
 5. To promote quality assurance through mechanisms such as accreditation.
 6. To further the concept of higher education and its positive effect in the overall mission of the fire protection, life safety and emergency services providers.
 7. To promote the concept of integrated life-long education and training for fire protection, life safety and emergency services providers.
 8. To collaborate with the National Fire Academy in meeting the goals stated in *America Burning* and other national initiatives that involve degree-granting institutions.
 9. To enhance the professional qualifications and development of the faculties at the institutions offering courses related to these programs.
 10. To encourage ongoing development of the quality, content and delivery of these programs.
 11. To encourage the exploration of innovative program enhancements.
 12. To explore and facilitate the integration of technology in all aspects of the educational programs.
 13. To impact the mission of the participating educational institutions.
 14. To promote inter-institutional recognition of courses.

The Survey Intent

In scoping out this project, the NFA project team envisioned the recent planning conference to be the first step leading to a spring meeting convening many more fire science coordinators. Between this initial planning conference and the spring meeting, the NFA team anticipated conducting a survey of fire science coordinators across the country. This survey would collect information to help in the design of a "conduit" that will promote a greater degree of sharing among fire science coordinators and their parent institutions.

The group did not spend a lot of time discussing the design and operation of the "conduit" since this will be the main objective of the proposed spring meeting. The group chose the word with some care after fairly lengthy discussion as a neutral term in order not to prejudice further discussion and creativity on its ultimate shape and operation. However, all generally agreed that it intends to suggest ways for fire science coordinators to share information, resources, experiences, challenges, etc. The group further viewed the "conduit" as a support of the goals of accreditation and certification groups such as the International Fire Service Accrediting Council and the Professional Qualifications Board, respectively.

As the planning conference unfolded, the discussions on the proposed survey shifted from an initial concept of basic data collection to a more issues-oriented approach. The group felt that collecting traditional, basic data is not now a critical need. Having some sense of the challenges and opportunities facing fire science coordinators would be more helpful at a later meeting when participants will attempt to design the "conduit."

The planning conference began with a brainstorming process identifying both challenges and opportunities that face fire science coordinators. It became apparent that some feedback from the universe of fire science coordinators on their challenges and opportunities is needed. Therefore, the group revisited the brainstormed list of challenges and opportunities and proposed the following survey process.

The Survey Process

Each fire science coordinator will be able to select the ten greatest current challenges in the fire science education arena from a list of 25. At the same time, the coordinator will be able to indicate two or three topics or areas of expertise the coordinator would be willing to present to others at the spring meeting in a large and small group setting. Finally, there would be space on the survey form for participants to list "other" topics not included in the list of 25.

In addition, each coordinator will respond to three opportunities in the same fashion or add others of personal choice.

The NFA will tabulate the results and make this information available for the spring meeting.

The 25 challenges and three opportunities follow.

Challenges to Fire Science Higher Education Programs

1. Access to non-traditional delivery of education.
2. Institutional competition.
3. Recognition and acceptance by academicians and administrators of fire science as a truly academic curriculum.
4. Transitioning from certificates to degrees.
5. Acceptance by fire service managers of fire science education.
6. High tuition costs.
7. Lack of writing, math and study skills by entry-level students.
8. Identification of various categories of fire science degree programs.
9. Student mix in the classroom (pre-service, experience level...)
10. Fire service self-perception of its uniqueness concerning course design.
11. The mentality, "Books don't put fires out."
12. Placement: credentials vs. certification at hiring.
13. Advancement: the importance of the degree in promotions.
14. The lack of mechanical aptitude on the part of entry-level students.
15. The lack of motivators such as tuition reimbursements, educational incentives, time off for attendance, etc. in pursuing higher education.
16. Recruiting and retaining a diverse student body.
17. Articulation agreements.
18. Model curricula.
19. Incorporating certification as part of the academic process.
20. Recruiting diverse and qualified faculty.
21. Faculty development.
22. Emerging emergency management programs.
23. Fire program placement and priority within the academic institution.
24. Lack of mentoring for minorities and women.
25. Lack of a higher education national network.

Here are the three opportunities that the group felt summarized all the others.

1. There are more sophisticated instructional technologies now available to fire science instructors.
2. Many training programs carry the American Council on Education recommendations for college credits.
3. There are increasing numbers of fire science graduates who can serve as role models for others.

The survey form would like something like the following.

I am interested in this topic	I have information to share on this topic	Topic
		1. Access to non-traditional delivery of education
		2. Institutional competition
		3. Recognition and acceptance by academicians and administrators of fire science as a truly academic curriculum
		4.

Add up to three other topics not covered above.

		1.
		2.
		3.

NFA will assume responsibility for compiling a survey mailing list from various existing sources:

- the mailing list the International Fire Service Accrediting Council provided the NFA;
- institutions listed in Peterson's Guide;
- existing NFA lists of TRADE (Training Resource And Data Exchange) members; and
- lists of affiliated schools with which each DDP Program Administrator has agreements.

This combination of sources will guarantee a sufficient coverage of the universe of fire science coordinators in the United States.

The Proposed "Conduit"

As stated above, the group did not spend a lot of time discussing the structure of the "conduit" since this will be the main objective of the proposed spring meeting. At this point the group did not rule out an organization with a certain structure nor did it endorse one. The sense was that it is too early in the process to predict one way or another and this should be the work of a larger group at a later meeting. There was a sense, however, that NFA probably better than any other organization is well poised to serve as coordinator or clearinghouse for the "conduit." This would be in perfect keeping with its national mission.

The participants listed a number of groups that could benefit from using the "conduit." The more obvious ones are fire science coordinators and faculty; administrators at the institutions with fire science programs; present and future students; high school, college counselors and other career counselors; potential employers; and persons in the grant-matching arena.

Publicizing the Project and Its Benefits

Success of the venture will depend largely on getting the information out quickly and exciting fire science coordinators about its possibilities. To do this, the group identified various avenues it will use to spread the message, generate interest about the survey and create excitement about the spring meeting.

The group identified the following channels of publicity. Participants divided the list among themselves, except for the last item for which NFA staff will assume responsibility.

- The Internet and various ListServes
- The upcoming fall TRADE Conference at the NFA
- Articles in various fire journals, periodicals such as *American Fire Journal*, *Fire Chief*, *Firehouse*, *Fire Engineering*, *The Voice*, *EMS*, *Industrial Fire World* and various state or organizational newsletters such as the "Executive Fire Officer Newsletter" and "The Pennsylvania Fireman."
- The Degrees at a Distance Program schools' information dissemination vehicles
- FEMA's Public Affairs Office from press releases

The group agreed on a list of the major pieces of information the publicity should include.

- Sponsorship of the project (NFA)
- Mission statement and broad statements of purpose
- Purpose, time and location of the spring meeting
- Survey purpose and its importance
- Members of the planning conference
- NFA contact for more information

The group expressed the wish that a publicity campaign begin as soon as possible after the NFA has approved the report, make it available on the FEMA/USFA web site including any other preliminary work to publicize this effort known via the WWW. It is anticipated that the publicity will precede the distribution of the survey form and alert fire science coordinators not only of the importance of the survey but of the tremendous possibilities the entire venture has to significantly influence higher education in the fire service.